UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,144	12/13/2001	Kai Narvanen	324-010673-US(PAR)	2773

2512 7590 10/03/2006

PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER	
JAIN, RAJ K	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/022,144	NARVANEN ET AL.	
	Examiner	Art Unit	
	Raj K. Jain	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautioal et al (US005949775A) in view of Jiang et al (US006741853B1

Regarding claims 1 and 10, Rautioal discloses a telecommunications system (see Fig. 2) which comprises an office network (office network 3 dashed line with users 4a, 6, 8 and 10), an operator network (the MSC, serves as the operator network from a cellular environment to the office network system interface 2) and a local area network (LAN dark line) between them, wherein the office network comprises

at least one mobile system terminal 5 (Fig. 2), a base transceiver station 4, a radio access gateway 1 controlling the base transceiver station and having a functional connection with the local area network and configured to adapt the data transmission protocols of said mobile system and local area network to each other (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC, and therefore, from the point of view of the switching

centre, the gateway computer 1 is just as any base station controller see col 5 lines 50-63.); and an

operator network comprises adaptation functions for adapting data transmission from the office network through the local area network at least to the data transmission protocol according to said mobile system and used by the public land mobile network (The interface 2 between the gateway computer and the MSC or the cellular operator network is the interface from corporate network to the operator network. The interface 2 serves as protocol conversion tasks being transferred from the mobile switching centre MSC to the gateway computer 1. From the point of view of the switching centre all communication operations occurring under the control of the gateway computer 1 occur in a certain location area 3 corresponding to the office in question. It could also be said that from the point of view of the switching centre the systems operating under the gateway computer constitute a base station subsystem (BSS), see col 6 lines 1-9.).

Rautioal discloses a general wireless and wireline office network in communications with an external cellular network via local area network. However, Rautioal fails to disclose a serving support node, packet control unit and gateway support node, which are configured to support the packet data protocol within its invention.

Jiang discloses a device aware system whereby the user's device type is detected, adapting the content for the intended device and delivering the information (see Fig 1, showing different devices 110, 112, 116 and 118 that require to be adapted for a wireless internet connection.). Jiang further discloses in an embodiment where

the wireless access network provider is a General Packet Radio Service (GPRS), see Fig. 5. The GPRS comprising; a serving support node SGSN 512 which is configured to support the packet data protocol of a mobile system and to have a functional connection with a radio access gateway 350 (see Fig. 5, when a Mobile Terminal (MT) accesses a GPRS network, a Packet Data Protocol (PDP) Context Activation procedure is utilized to obtain an IP address for the MT. An initial request from the MT is sent to a Serving GPRS Service Node 512(SGSN) which forwards the request to a Gateway GPRS Service Node 516 (GGSN). The GGSN then interfaces over a Gi interface to a Dynamic Host Configuration Protocol (DHCP) server to authenticate the MT and obtain an IP address. The SGSN has functional connection with a radio access gateway 350 WPM, see col 8 lines 9-19);

a packet control unit which is configured to support the packet data protocol of a mobile system and to have a functional connection with said radio access gateway and serving support node (see Fig. 5, a PCU 514 is configured to provide support and functional connection with SGSN 512 and radio access 350), and

a gateway support node 516 which is configured to support the packet data protocol of a mobile system and to have a functional connection with a radio access gateway, serving support node, and packet control unit (again see Fig. 5, col 8 lines 9-19, a GGSN 516 supports the packet data protocol of mobile 312 and has functional connection with radio access gateway 350 the wireless portal middleware, the WPM is a programmable platform, providing functionality and interfaces for implementing

telecommunication services, such as voice mail, e-mail, and Personal Information Management (PIM), and Internet access services).

Signals received by the fixed radio base station over the "air interface" from the mobile unit are identified by the mobile unit to the base station's operating system and routed according to whether they are conventional digitized telephone signals or "mobile - IP" (Internet Protocol) data signals. If they are telephone signals they are carried over the conventional cellular radio circuit-switched system. If they are Internet Protocol they are routed by way of a packet-switched system, specifically the proposed General Packet Radio System (GPRS). The GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN). In the gateway node an address conversion is performed between the address used in the packet network and the address (IP address) used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal equipment TE of the packet network to that serving GPRS node, under the management of which the MS is located. The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users and avoiding IP address conflict.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services in between the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users and avoiding IP address conflict.

Regarding claim 2, Rautioal discloses a mobile station (Fig. 2, ref. 5) configured to support the packet data protocol of said mobile system (see col 3 lines 35-65, the radio interface in the office network is substantially similar to the radio interface of a conventional public cellular radio network and therefore the mobile 5 would provide support to the packet data protocol). Rautioal fails to disclose a serving support node, packet control unit and gateway support node which are configured to support the packet data protocol within its invention.

Jiang discloses a device aware system whereby the user's device type is detected, adapting the content for the intended device and delivering the information (see Fig 1, showing different devices 110, 112, 116 and 118 that require to be adapted for a wireless internet connection.). Jiang further discloses in an embodiment where the wireless access network provider is a General Packet Radio Service (GPRS) see Fig. 5. The GPRS comprising an SGSN 512 and GGSN 516.

The GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN). In the gateway node an address conversion is performed between the address used in the packet network and the address (IP address) used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal

equipment TE of the packet network to that serving GPRS node, under the management of which the MS is located. The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services inbetween the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users.

Regarding claim 3, Rautioal discloses a location database for registering mobile stations in the operator network (see Fig. 2, the subscriber database SDB and visitor database VDB for the mobile stations MS for managing location and subscriber information);

an adaptation function in the operator network for adapting a packet data connection from the office network through the local area network at least to the packet data protocol used by the public land mobile network (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile

switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC.) and

in response to the packet data connection request made by the mobile station, the office network is configured alternatively to establish a packet data connection to the destination address defined by the link request through the serving support node and gateway support node of the office network in response to the fact that said mobile station is registered to the office network, **or**

to route the packet data connection to the public land mobile network for onward routing to the destination address in response to the fact that said mobile station is not registered to the office network.

(Examiner acknowledges the alternative "or" within this limitation and is therefore broadly interpreted to satisfy one of the limitations and not specifically both limitations, as no emphasis is placed to mean both limitations are required to be satisfied.)

Rautioal fails to disclose a packet data connection request made by the mobile station and the office network being configured to support the packet data protocol within its invention.

Jiang discloses in an embodiment where the wireless access network provider is a General Packet Radio Service (GPRS) see Fig. 5. The GPRS comprising an SGSN 512 and GGSN 516. See Figs 9A and 9B where a user initiates a link with the wireless portal middleware (WPM) for access to the internet and other services (see col 12 lines 7-17).

The GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN). In the gateway node an address conversion is performed between the address used in the packet network and the address (IP address) used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal equipment TE of the packet network to that serving GPRS node, under the management of which the MS is located. Furthermore, the GPRS system has MSC/ visitor location registers (VLR) 534 (Fig. 5) which interfaces to the Home Location Register (HLR) 536 and the Public Switched Telephone Network (PSTN) 338 for user authorization and call routing purposes. The VLR and HLR provide storage and user information of mobile location and status. The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users by maintaining a database registers of it users.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services inbetween the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users by maintaining a database registers of it users.

Regarding claim 6, Rautioal fails to disclose a gateway support node connection to the DHCP server within its invention.

Jiang discloses a data transmission connection (See Fig. 7) configured from the gateway support node to a DHCP server for dynamically defining the IP addresses of 25 mobile stations (The gateway support node 730 the wireless portal middleware connects to various servers one being the DHCP server 744 for dynamic IP address allocation, see col 9 lines 19-25. Dynamically allocating IP addresses to mobile terminals (MT) in a GPRS network prevents IP address conflicts and provides addresses that are usable to MTs running real-time applications such as VoIP. Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services inbetween the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users.

Regarding claim 7, Rautioal discloses an adaptation function in the operator network for adapting a packet data connection from the office network through the local area network at least to the packet data protocol used by the public land mobile network (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC.)

Rautioal specifically fails to disclose a packet data connection between a serving support node or a gateway support node.

Jiang discloses in an embodiment where the wireless access network provider is a General Packet Radio Service (GPRS) see Fig. 5. The GPRS comprising an SGSN 512 and GGSN 516. See Figs 9A and 9B where a user initiates a link with the wireless portal middleware (WPM) for access to the internet and other services (see col 12 lines 7-17).

The GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN). In the gateway node an address conversion is performed between the address used in the packet network and the address (IP address) used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal equipment TE of the packet network to that serving GPRS node, under the management of which the MS is located. The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services inbetween the office

network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users.

Regarding claim 8, Rautioal discloses a method for establishing a packet data communications (see Fig. 2) which comprises an office network (office network 3 dashed line with users 4a, 6, 8 and 10), an operator network (the MSC, serves as the operator network from a cellular environment to the office network system interface 2) and a local area network (LAN dark line) between them, wherein the office network comprises

at least one mobile system terminal 5, a base transceiver station 4, a radio access gateway 1 controlling the base transceiver station and having a functional connection with the local area network and configured to adapt the data transmission protocols of said mobile system and local area network to each other (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC, and therefore, from the point of view of the switching centre, the gateway computer 1 is just as any base station controller see col 5 lines 50-63.); and an

operator network comprises adaptation functions for adapting data transmission from the office network through the local area network at least to the data transmission protocol according to said mobile system and used by the public land mobile network

(The interface 2 between the gateway computer and the MSC or the cellular operator network is the interface from corporate network to the operator network. The interface 2 serves as protocol conversion tasks being transferred from the mobile switching centre MSC to the gateway computer 1. From the point of view of the switching centre all communication operations occurring under the control of the gateway computer 1 occur in a certain location area 3 corresponding to the office in question. It could also be said that from the point of view of the switching centre the systems operating under the gateway computer constitute a base station subsystem (BSS), see col 6 lines 1-9.).

Rautioal discloses a general wireless and wireline office network in communications with an external cellular network via local area network. However, Rautioal fails to disclose a serving support node, packet control unit and gateway support node configured to support the packet data protocol within its invention.

Jiang discloses a device aware system whereby the user's device type is detected, adapting the content for the intended device and delivering the information (see Fig 1, showing different devices 110, 112, 116 and 118 that require to be adapted for a wireless internet connection.). Jiang further discloses in an embodiment where the wireless access network provider is a General Packet Radio Service (GPRS), see Fig. 5. The GPRS comprising; a serving support node which is configured to support the packet data protocol of a mobile system and to have a functional connection with a radio access gateway (see Fig. 5, when a Mobile Terminal (MT) accesses a GPRS network, a Packet Data Protocol (PDP) Context Activation procedure is utilized to obtain an IP address for the MT. An initial request from the MT is sent to a Serving

GPRS Service Node 512(SGSN) which forwards the request to a Gateway GPRS Service Node 516 (GGSN). The GGSN then interfaces over a Gi interface to a Dynamic Host Configuration Protocol (DHCP) server to authenticate the MT and obtain an IP address. The SGSN has functional connection with a radio access gateway 350 WPM, see col 8 lines 9-19);

a packet control unit which is configured to support the packet data protocol of a mobile system and to have a functional connection with said radio access gateway and serving support node (see Fig. 5, a PCU 514 is configured to provide support and functional connection with SGSN 512 and radio access 350), and

a gateway support node which is configured to support the packet data protocol of a mobile system and to have a functional connection with a radio access gateway, serving support node, and packet control unit (again see Fig. 5, col 8 lines 9-19, a GGSN 516 supports the packet data protocol of mobile 312 and has functional connection with radio access gateway 350 the wireless portal middleware, the WPM is a programmable platform, providing functionality and interfaces for implementing telecommunication services, such as voice mail, e-mail, and Personal Information Management (PIM), and Internet access services).

making a packet data connection request from the mobile station to the office network (See Figs 9A and 9B where a user initiates a link with the wireless portal middleware (WPM) for access to the internet and other services (see col 12 lines 7-17)).

establishing a packet data connection from the serving support node and the gateway support node to a destination address defininied by the link request (see Figs. 9A and 9B, col 12 lines 7-40, once the MS initiates a PPP connection, the request is routed to the authentication server 748 (see Fig. 7) and if it is successful an IP address is assigned by the DHCP server 744 and connection is granted to the mobile 312 (fig. 5) which can than access the internet and other services via the SGSN 512 and GGSN 516 and radio gateway 350.)

adapting the data transmission protocols of mobile system and the local area network to each other in the radio access gateway (see Fig. 5, col 8 lines 9-19 the GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN) 516. In the gateway node an address conversion is performed between the address used in the packet network and the IP address used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal equipment TE of the packet network to that serving GPRS node. A GGSN 516 supports the packet data protocol of mobile 312 and has functional connection with radio access gateway 350 the wireless portal middleware, the WPM is a programmable platform, providing functionality and interfaces for implementing telecommunication services, such as voice mail, e-mail, and Personal Information Management (PIM), and Internet access services. Thus the WPM provides the adapting functionality between the mobile environment and the LAN interface provided thru the internet 352.).

The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users and avoid IP address conflict.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services in between the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users and avoid IP address conflict.

Regarding claim 9, Rautioal discloses a location database for registering mobile stations in the operator network (see Fig. 2, the subscriber database SDB and visitor database VDB for the mobile stations MS for managing location and subscriber information);

an adaptation function in the operator network for adapting a packet data connection from the office network through the local area network at least to the packet data protocol used by the public land mobile network (The gateway computer 1 shown in the figure acts as a link between the local area network LAN and a mobile switching centre MSC. The interface 2 between the gateway computer 1 and the mobile

switching centre MSC complies with the same A-interface standard that defines communication between ordinary base station controllers BSC and a mobile switching centre MSC.) and

in response to the packet data connection request made by the mobile station, the office network is configured alternatively to establish a packet data connection to the destination address defined by the link request through the serving support node and gateway support node of the office network in response to the fact that said mobile station is registered to the office network, **or**

to route the packet data connection to the public land mobile network for onward routing to the destination address in response to the fact that said mobile station is not registered to the office network.

(Examiner acknowledges the alternative "or" within this limitation and is therefore broadly interpreted to satisfy one of the limitations and not specifically both limitations, as no emphasis is placed to mean both limitations are required to be satisfied.)

Rautioal fails to disclose a packet data connection request made by the mobile station and the office network being configured to support the packet data protocol within its invention.

Jiang discloses in an embodiment where the wireless access network provider is a General Packet Radio Service (GPRS) see Fig. 5. The GPRS comprising an SGSN 512 and GGSN 516. See Figs 9A and 9B where a user initiates a link with the wireless portal middleware (WPM) for access to the internet and other services (see col 12 lines 7-17).

The GPRS network transmits packet data to a Packet Data Network and receives packet data through the GPRS gateway node (GGSN). In the gateway node an address conversion is performed between the address used in the packet network and the address (IP address) used in the GPRS network and it contains the routing information of GPRS users, which is used to bring about a connection from the terminal equipment TE of the packet network to that serving GPRS node, under the management of which the MS is located. Furthermore, the GPRS system has MSC/ visitor location registers (VLR) 534 (Fig. 5) which interfaces to the Home Location Register (HLR) 536 and the Public Switched Telephone Network (PSTN) 338 for user authorization and call routing purposes. The VLR and HLR provide storage and user information of mobile location and status. The purpose of GPRS services is to operate independently of current circuit switched services, and especially to utilize the unused resources of circuit switched traffic and provide predictability and control of its mobile users so that no two users have the same IP address that share the same LAN interface. Thus employing the GPRS system as an interface to office network and a LAN connection would a allow a greater degree of control and predictability of IP addressing among it mobile users by maintaining a database registers of it users.

Thus it would have been obvious at the time the invention was made to modify the teachings of Rautioal and incorporate a GPRS services inbetween the office network and the LAN interface so as to have greater degree of control and predictability of IP addressing among it mobile users by maintaining a database registers of it users.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautioal et al (US005949775A) as applied to claim 1 above and in view of Jiang et al (US006741853B1) and further in view of Bohm et al (US006370385B1).

Regarding claim 4, Rautioal fails to disclose a serving support node, packet control unit and gateway support node which are configured to support the packet data protocol within its invention.

Jiang discloses a GPRS (see fig. 5) system with SGSN 512 and GGSN 516, PCU 514 and radio access gateway the wireless portal middleware (WPM) 350. The physical location of the GPRS elements in Fig. 5 are shown as individual components without specific regard to location as being within a single element. Thus the invention does not limit the location of the components or its functionality due to its location. None the less Jiang explicitly fails to disclose these components within a single element.

With this regard, Bohm discloses a mobile communications network (Fig. 1 with its GPRS components including GGSN, SGSN and mobile stations). Bohm further discloses within its forth embodiment (see Fig. 5, col 5 lines 29-50.). FIG. 5 illustrates an example of how the mobile switching centers MSC/SGSN, the gateways GGSN and GMSC, and the controllers BSC/RNC have been physically located in a centralized manner at one single geographical site 20, thereby simplifying network maintenance and operation.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Bohm within Jiang and Rautioal to integrate the GPRS

components within a single element, thereby simplifying network maintenance and operation.

Regarding claim 5, Rautioal fails to disclose a serving support node, packet control unit and gateway support node which are configured to support the packet data protocol within its invention.

Jiang discloses a GPRS (see fig. 5) system with SGSN 512 and GGSN 516, PCU 514 and radio access gateway the wireless portal middleware (WPM) 350. The physical location of the GPRS elements in Fig. 5 are shown as individual components without specific regard to location as being within a single element. Thus the invention does not limit the location of the components or its functionality due to its location. None the less Jiang explicitly fails to disclose these components within a single element.

With this regard, Bohm discloses a mobile communications network (Fig. 1 with its GPRS components including GGSN, SGSN and mobile stations). Bohm further discloses within its forth embodiment (see Fig. 5, col 5 lines 29-50.). FIG. 5 illustrates an example of how the mobile switching centers MSC/SGSN, the gateways GGSN and GMSC, and the controllers BSC/RNC have been physically located in a centralized manner at one single geographical site 20, thereby simplifying network maintenance and operation.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Bohm within Jiang and Rautioal to integrate the GPRS

components within a single element, thereby simplifying network maintenance and operation.

Response to Arguments

Applicant's arguments filed 7 August 2006 have been fully considered but they are not persuasive.

With respect to claims 1-3 and 6-10 Applicant contends that the combination of Rautioal et al in view of Jiang et al does not disclose fails to disclose "GPRS elements, such as a radio access gateway, serving support node and a gateway support node to provide the implementation of appropriate packet-switched gateway elements inside the network and an appropriate routing for carrying out the internal packet switched services of the office network".

Examiner respectfully disagrees; Fig. 5 of Jiang clearly discloses where the wireless access network provider is a General Packet Radio Service. The GPRS comprising; a serving support node SGSN 512 which is configured to support the packet data protocol of a mobile system and to have a functional connection with a radio access gateway 350, a Serving GPRS Service Node 512(SGSN) which forwards a request to a Gateway GPRS Service Node 516 (GGSN). The SGSN has functional connection with a radio access gateway 350 WPM, see col 8 lines 9-19.

Regarding the motivational aspect, Examiner concurs with applicant that neither reference explicitly recites the motivation as stated for combining, however, that is not

say that they are not combinable. The motivation provided by Examiner was one possible motivation for combining, another motivation may be to provide seamless and transparent communications to the user from office environment to outside environment. Thus, Examiner believes the combination of references to be proper and therefore the rejection stands for claims 1-3 and 6-10.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJ
September 21, 2006

CHI PHAM
SUPERVISORY PATENT EXAMINER 9/28/06